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SINCE FILE

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ENTRY

SESSION

1.35

1.65

FILE 'MEDLINE' ENTERED AT 09:04:45 ON 02 AUG 2000

FILE 'CAPLUS' ENTERED AT 09:04:45 ON 02 AUG 2000

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FILE 'SCISEARCH' ENTERED AT 09:04:45 ON 02 AUG 2000

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FILE 'TOXLINE' ENTERED AT 09:04:45 ON 02 AUG 2000

=> s L1

L2 5480 L1

=> s L2 and (hydroly?(w)propionamide)

L3 1 L2 AND (HYDROLY?(W) PROPIONAMIDE)

=> d l3 ibib ab

L3 ANSWER 1 OF 1 MEDLINE

ACCESSION NUMBER: 91159474 MEDLINE

DOCUMENT NUMBER: 91159474

TITLE: Cloning and characterization of an amidase gene from
Rhodococcus species N-774 and its expression in

Escherichia

coli.

AUTHOR: Hashimoto Y; Nishiyama M; Ikehata O; Horinouchi S; Beppu T

CORPORATE SOURCE: Department of Agricultural Chemistry, University of Tokyo,
Japan..

SOURCE: BIOCHIMICA ET BIOPHYSICA ACTA, (1991 Feb 16) 1088 (2)
225-33.

Journal code: AOW. ISSN: 0006-3002.

PUB. COUNTRY: Netherlands

Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals; Cancer Journals

OTHER SOURCE: GENBANK-X54074; GENBANK-X54747; GENBANK-X54748;

GENBANK-S57579; GENBANK-S59357; GENBANK-M75971;

GENBANK-M75972; GENBANK-M75973; GENBANK-M75974;

GENBANK-M75975

ENTRY MONTH: 199106

AB For investigation of an unknown open reading frame which is present
upstream of the nitrile hydratase (NHase) gene from Rhodococcus sp.

N-774,

a longer DNA fragment covering the entire gene was cloned in Escherichia
coli. Nucleotide sequencing and detailed subcloning experiments predicted
a single open reading frame consisting of 521 amino acid residues of Mr
54,671. The amino acid sequence, especially its NH2-terminal portion,
showed significant homology with those of indoleacetamide hydrolases from
Pseudomonas savastanoi and Agrobacterium tumefaciens, and acetamidase
from

Aspergillus nidulans. The 521-amino acid coding region was therefore

expressed by use of the E. coli lac promoter in E. coli, and was found to direct a considerable amidase activity. This amidase **hydrolyzed propionamide** efficiently, and also hydrolyzed, at a lower efficiency, acetamide, acrylamide and indoleacetamide. These data clearly show that the unknown open reading frame present upstream of the NHase coding region encodes an amidase. Because the TAG translational stop

codon

of the amidase is located only 75 base pairs apart from the ATG start codon of the alpha-subunit of NHase, these genes are probably translated in a polycistronic manner.

=> s d his

<-----User Break----->

u

SEARCH ENDED BY USER

=> d his

(FILE 'HOME' ENTERED AT 09:02:05 ON 02 AUG 2000)

INDEX 'ADISALERTS, ADISINSIGHT, AGRICOLA, AIDSLINE, ANABSTR, AQUASCI, BIOBUSINESS, BIOCOMMERCE, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA, CANCERLIT, CAPLUS, CEABA, CEN, CIN, CONFSCI, CROPB, CROPU, DDFB, DDFU, DGENE, DRUGB, DRUGLAUNCH, DRUGMONOG2, ...' ENTERED AT 09:02:57 ON 02 AUG 2000

SEA AMIDOHYDROLASE

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SDI/UPDATE SEARCH FIELD
NEWS 5 May 1 RN CROSSOVER AND ANSWER SIZE LIMITS INCREASED
NEWS 6 May 22 CITED REFERENCES NOW AVAILABLE IN CAPLUS AND CA FILE
NEWS 7 May 22 POSTPROCESSING OF SEARCH RESULTS MAY BE AFFECTED
BY ADDITION OF CITED REFERENCES TO CAPLUS, CA,
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NEWS 10 Jun 28 CAS covers Web-distributed preprints
NEWS 11 Jul 7 Patent Full-text Cluster, PNTTEXT, introduced
NEWS 12 Jul 27 EUROPATFULL - loading of backlog data
NEWS 13 Jul 27 MORE FREQUENT UPDATES FOR DERWENT WORLD PATENTS
INDEX IN 2000
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with New Data
NEWS 15 Jul 27 DERWENT WORLD PATENTS INDEX: FAST TRACK RELEASE OF
EQUIVALENT PATENTS

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=> index bioscience

FILE 'DRUGMONOG' ACCESS NOT AUTHORIZED

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.30

0.30

INDEX 'ADISALERTS, ADISINSIGHT, AGRICOLA, AIDSLINE, ANABSTR, AQUASCI,
BIOBUSINESS, BIOCOMMERCE, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO,
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DGENE, DRUGB, DRUGLAUNCH, DRUGMONOG2, ...' ENTERED AT 09:02:57 ON 02
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57 FILES IN THE FILE LIST IN STNINDEX

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=> s amidohydrolase

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 105 FILE TOXLIT
 154 FILE USPATFULL
 76 FILE WPIDS
 76 FILE WPINDEX

46 FILES HAVE ONE OR MORE ANSWERS, 57 FILES SEARCHED IN STNINDEX

L1 QUE AMIDOHYDROLASE

=> d rank

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F37	5	CROPB
F38	5	FROSTI
F39	4	NIOSHTIC
F40	3	BIOCOMMERCE
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F42	2	OCEAN
F43	1	ADISALERTS
F44	1	DRUGLAUNCH
F45	1	EMBAL
F46	1	HEALSAFE

=> file medline caplus scisearch toxline

=> s E3;D

L1 1 PROPIONAMIDE/CN

L1 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2001 ACS

RN 79-05-0 REGISTRY

CN Propanamide (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN **Propionamide (6CI, 8CI)**

OTHER NAMES:

CN Propanimidic acid

CN Propionic acid amide

CN Propionic amide

CN Propionimidic acid

CN Propylamide

FS 3D CONCORD

MF C3 H7 N O

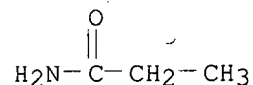
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LC STN Files: AGRICOLA, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, DETHERM*, EMBASE, GMELIN*, HODOC*, IFICDB, IFIPAT, IFIUDB, MEDLINE, MRCK*, NAPRALERT, NIOSHTIC, PIRA, RTECS*, SPECINFO, TOXLINE, TOXLIT, TULSA, USPATFULL

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Other Sources: EINECS**, NDSL**, TSCA**

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794 REFERENCES IN FILE CA (1967 TO DATE)

26 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

794 REFERENCES IN FILE CAPLUS (1967 TO DATE)

67 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L3 ANSWER 1 OF 1 MEDLINE
 ACCESSION NUMBER: 91159474 MEDLINE
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 Journal code: AOW. ISSN: 0006-3002.
 PUB. COUNTRY: Netherlands
 Journal; Article; (JOURNAL ARTICLE)
 LANGUAGE: English
 FILE SEGMENT: Priority Journals; Cancer Journals
 OTHER SOURCE: GENBANK-X54074; GENBANK-X54747; GENBANK-X54748;
 GENBANK-S57579; GENBANK-S59357; GENBANK-M75971;
 GENBANK-M75972; GENBANK-M75973; GENBANK-M75974;
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